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10/568,681

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Ken'ichi Kasazumi

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EXAMINER

DOAK, JENNIFER L

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|----------------------------------------|--|
| Office Action Summary | Application No. 10/568,681 | Applicant(s) KASAZUMI ET AL. | |
| | Examiner Jennifer L. Doak | Art Unit 2872 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13, 16-20, 24 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18, 25 is/are allowed.
- 6) ☒ Claim(s) 13, 16, 17, 19, 20 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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/Stephone B. Allen/

Supervisory Patent Examiner, Art Unit 2872 DETAILED ACTION

Specification

The title of the invention is not descriptive. “The title should be brief but technically accurate and descriptive and should contain fewer than 500 characters,” MPEP §606. Specifically, statements concerning the general type or nature of the entire system or its components that are common to many other similar elements or systems that are known in the art are not sufficiently descriptive to provide “informative value in indexing, classifying, searching, etc.,” MPEP §606.01. Examiner recommends directing the title to what Applicant believes is the point of novelty, since it is by the novelty that “indexing, classifying, searching, etc.” is generally accomplished. Nevertheless, it should be noted that, pursuant to MPEP §606.01, “[i]f a satisfactory title is not supplied by the applicant, the examiner may, at the time of allowance, change the title by examiner’s amendment.”

Applicant's amendment is noted, but is still found insufficient. Examiner suggests adding key structural features to the title to make it sufficiently descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 13, 16-17, 20, and 24 are rejected under 35 U.S.C. 102(b) as being anticipated by Gerhard (US 6140979).

Regarding claims 13 and 24, Gerhard discloses a 2-D image display device/an illumination light source comprising: a coherent light source (Fig. 17: 78); 2-D beam scanner for scanning light from the coherent light source two-dimensionally (152); a light intensity modulator for modulating (154) the light from the coherent light source in intensity based on a video signal; a 1-D beam scanner for minutely oscillating the light (Fig. 19) from the coherent light source (78), wherein the 1-D scanner oscillates the light from the coherent light source one-dimensionally in a direction perpendicular to a scan line by the 2-D beam scanner (this feature is seen to be an inherent teaching of the device since it is disclosed that the angular shift of the beams are controlled, that the shift corresponds to the voltage, and offsets raster pinch (col. 11, lns. 1-20) is disclosed, and it is apparent that the control and beam relationships set forth above must be present for the device to function as intended).

The device is then claimed to be used to suppress speckle noises generated by the scanned light of the coherent light source that is scattered from a scanning surface. Because the structure of the claimed system, as identified above and in the original action, is the same as that claimed, it must inherently perform the same function. See MPEP § 2112.01. "While features of an apparatus may be recited either structurally or functionally, claims directed to an apparatus must be distinguished from the prior art in terms of structure rather than function. See MPEP § 2113; *In re Schreiber*, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997); *In re Swinehart*, 439 F.2d 210, 212-13, 169 USPQ 226, 228-29 (CCPA 1971); *In re Danly*, 263 F.2d 844, 847, 120 USPQ 528, 531 (CCPA 1959). "[A]pparatus claims cover what a device is,

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not what a device does.” *Hewlett-Packard Co. v. Bausch & Lomb Inc.*, 909 F.2d 1464, 1469, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990) (emphasis in original).

Regarding claims 16-17, Gerhard does not explicitly state the 1-D beam scanner means oscillates the light from the coherent light source on a screen in an amplitude equal to or larger than a spot diameter of light collected on the screen by a beam collector, and equal to or smaller than an interval of scan lines by the 2-D beam scanner; while the 2-D beam scanner the light from the coherent light source that is comparable to one digital image data along a scan line, the 1-D beam oscillates the light from the coherent light source at least from a largest amplitude to to an amplitude following the largest amplitude.

However, these features are seen to be an inherent teaching of the device since it is disclosed that the angular shift of the beams are controlled, that the shift corresponds to the voltage, and offsets raster pinch (col. 11, lns. 1-20) is disclosed, and it is apparent that the control and beam relationships set forth above must be present for the device to function as intended.

Regarding claim 20, Gerhard further discloses that 1-D beam scanner uses an electro-optic effect (col. 11, ln. 1).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gerhard (US 6140979).

Regarding claim 19, Examiner makes the following findings of fact: Gerhard further discloses the light from the coherent light source is oscillated in N cycles by the 1-D beam scanner while the 2-D beam scanner scans the light from the coherent light source that is comparable to one digital image data along a scan line, (col. 11, lns. 1-20). Gerhard does not disclose that a spot diameter of the light projected onto the screen is of a size equal to or larger than $1/(4N)$ of a distance over which the light is scanned by the 2-D beam scanner within the scan time. However, it has been held that where the general conditions of a claim are disclosed

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in the prior art, discovering the optimum or workable ranges involves only routine skill in the art, *In re Aller*, 105 USPQ 233 (C.C.P.A. 1955). The benefits of optimization include improved clarity and coherence of the displayed image.

Therefore, Examiner concludes that it would have been obvious to an ordinarily skilled artisan at the time of invention to optimize the distance and proportion of the projector light and image with respect to the projection system so as to improve the quality of the projected image.

Response to Arguments

Applicant's arguments submitted have been considered, but are not found persuasive.

Applicant argues that certain limitations regarding the scanner are not taught because Gerhard teaches shifting propagation involving element 300.

Examiner respectfully disagrees. Element 300 was not identified by Examiner as the scanning element, and otherwise the limitations of the claims were identified and correlated with the references as indicated above and in the first office action on the merits. Applicant has merely made the allegation that the limitations are not met, and thus has not provided any evidence or argument directed to how the identified elements in the first action fail to meet the claimed limitations or to how the identified elements are otherwise distinguishable from the claimed limitations. Rather, Applicant has offered only generic summaries of other aspects of the references. Moreover, Examiner is obligated such that the claim language has been given its broadest reasonable interpretation. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Allowable Subject Matter

Pursuant to the reasons set forth in the previous Office Action, Claims 18 and 25 are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer L. Doak whose telephone number is (571)272-9791.

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The examiner can normally be reached on Mon-Thurs: 7:30A-5:00P, Alt Fri: 7:30A-4:00P (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephone B. Allen can be reached on 571-272-2434. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. L. D./
Examiner, Art Unit 2872

/Stephone B. Allen/
Supervisory Patent Examiner, Art Unit 2872